

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 1 229 542 A3

(12)

## EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
14.01.2004 Bulletin 2004/03

(51) Int Cl.7: G11B 27/036, G11B 27/034,  
G11B 27/10, H04N 5/92,  
H04N 5/93

(43) Date of publication A2:  
07.08.2002 Bulletin 2002/32

(21) Application number: 01310666.1

(22) Date of filing: 20.12.2001

(84) Designated Contracting States:  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR

Designated Extension States:  
AL LT LV MK RO SI

(30) Priority: 05.02.2001 KR 2001005374

(71) Applicant: SAMSUNG ELECTRONICS CO., LTD.  
Suwon-City, Kyungki-do (KR)

(72) Inventors:

- Park, Sung-wook  
Seocho-gu, Seoul (KR)

- Lee, Hee-soo  
Gwonseon-gu, Suwon-si, Gyeonggi-do (KR)
- Bak, Bong-gil  
Seoul (KR)
- Chung, Hyun-kwon  
Gwangju-gun, Gyeonggi-do (KR)
- Chung, Tae-yun  
Bundang-gu, Seongnam-si, Gyeonggi-do (KR)

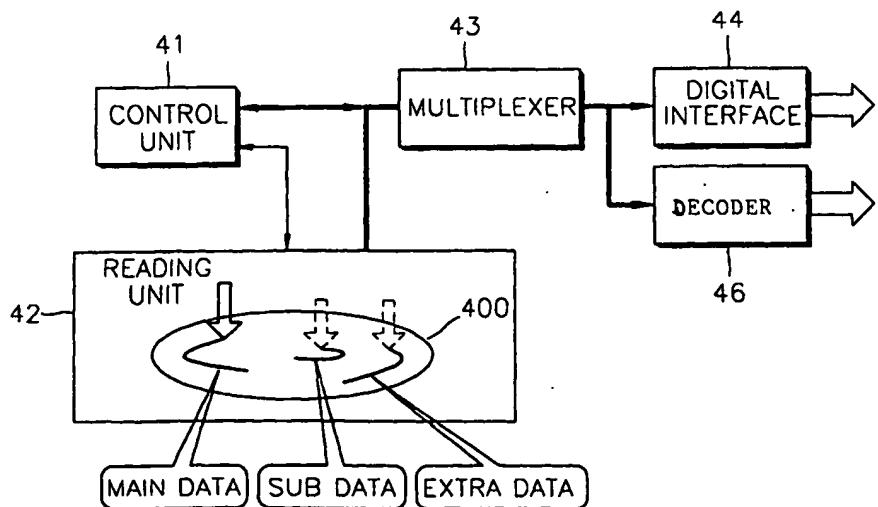
(74) Representative: Robinson, Ian Michael et al  
Appleyard Lees,  
15 Clare Road  
Halifax HX1 2HY (GB)

### (54) Recording and reproducing multiple bitstreams in a data storage medium

(57) A data storage medium (400) in which multiple bitstreams are recorded, an apparatus and method for recording the multiple bitstreams, and an apparatus and method for reproducing the multiple bitstreams are provided. The reproducing apparatus includes: a reading unit (42) for reading main data including audio data and/

or video data, and reading sub data recorded in a separate bitstream from the main data, which is later reproduced in synchronization with the main data; and a multiplexer (43) for multiplexing the main data and sub data read by the reading unit. Therefore, multiple bitstreams can be read and reproduced at the same time.

FIG. 4





European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 01 31 0666

DOCUMENTS CONSIDERED TO BE RELEVANT									
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)						
X	ROYAL PHILIPS ELECTRONICS: "Super Video Compact Disc (SVCD) - System Specification - version 0.9" COMPACT DISC SUPER VIDEO, November 1998 (1998-11), pages 1-86, XP002260259 * the whole document * ---	1-36	G11B27/036 G11B27/034 G11B27/10 H04N5/92 H04N5/93						
X	EP 0 913 822 A (WEA MFG INC) 6 May 1999 (1999-05-06) * abstract * * column 1, line 13 - line 17 * * column 1, line 53 - line 58 * * column 3, line 4 - line 14 * * column 3, line 17 - line 24 * ---	1-36							
X	EP 0 831 647 A (MATSUSHITA ELECTRIC IND CO LTD) 25 March 1998 (1998-03-25) * abstract * * figure 4B * ---	1-36							
A	EP 0 797 196 A (VICTOR COMPANY OF JAPAN) 24 September 1997 (1997-09-24) * abstract * * column 4, line 14 - line 52 * * column 7, line 11 - line 13 * * figure 1 * ---	1-36	TECHNICAL FIELDS SEARCHED (Int.Cl.7) G11B H04N						
A	WO 95 06391 A (NEAL CHARLES BAILEY ; THOMSON CONSUMER ELECTRONICS (US)) 2 March 1995 (1995-03-02) * abstract * * figure 2 * -----	1-36							
<p>The present search report has been drawn up for all claims</p> <table border="1"> <tr> <td>Place of search</td> <td>Date of completion of the search</td> <td>Examiner</td> </tr> <tr> <td>THE HAGUE</td> <td>7 November 2003</td> <td>Maetz, A</td> </tr> </table> <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>				Place of search	Date of completion of the search	Examiner	THE HAGUE	7 November 2003	Maetz, A
Place of search	Date of completion of the search	Examiner							
THE HAGUE	7 November 2003	Maetz, A							

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 31 0666

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-11-2003

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0913822	A	06-05-1999	US	5949752 A	07-09-1999
			AT	234500 T	15-03-2003
			AU	737016 B2	09-08-2001
			AU	8959598 A	20-05-1999
			DE	69812033 D1	17-04-2003
			DE	69812033 T2	16-10-2003
			EP	0913822 A2	06-05-1999
			JP	11243527 A	07-09-1999
			SG	77200 A1	19-12-2000
<hr/>					
EP 0831647	A	25-03-1998	DE	69710279 D1	21-03-2002
			DE	69710279 T2	27-06-2002
			EP	0831647 A1	25-03-1998
			HK	1009032 A1	31-05-2002
			JP	3379961 B2	24-02-2003
			CN	1194753 A ,B	30-09-1998
			EP	1152413 A2	07-11-2001
			WO	9738527 A1	16-10-1997
			JP	3356769 B2	16-12-2002
			JP	2002208257 A	26-07-2002
			JP	3356770 B2	16-12-2002
			JP	2002245753 A	30-08-2002
			US	6088507 A	11-07-2000
<hr/>					
EP 0797196	A	24-09-1997	JP	9261593 A	03-10-1997
			DE	69714632 D1	19-09-2002
			DE	69714632 T2	10-04-2003
			EP	0797196 A2	24-09-1997
			US	5963703 A	05-10-1999
<hr/>					
WO 9506391	A	02-03-1995	BR	9307880 A	30-04-1996
			WO	9506391 A1	02-03-1995
			CN	1111882 A ,B	15-11-1995
			DE	69324607 D1	27-05-1999
			DE	69324607 T2	26-08-1999
			DK	714582 T3	31-05-1999
			EP	0714582 A1	05-06-1996
			JP	9501808 T	18-02-1997
			PL	313219 A1	10-06-1996
			RU	2129758 C1	27-04-1999
			US	5745184 A	28-04-1998
<hr/>					